Army Regulation 5–25

Management

Army Weather Functional Activities

Headquarters
Department of the Army
Washington, DC
2 July 2013

UNCLASSIFIED

SUMMARY

AR 5-25
Army Weather Functional Activities

This new publication, dated 2 July 2013--

- Sets forth policies and establishes responsibilities for managing weather functions within the Army (throughout).

- Sets forth policy for the acquisition of airfield automated observing systems (throughout).

- Provides guidance for the collaboration of weather activities between Army laboratories and centers (throughout).

- Provides policies for requesting weather information (throughout).

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Effective 2 August 2013

Management

Army Weather Functional Activities

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:

GERALD B. O'KEEFE
Acting Administrative Assistant
to the Secretary of the Army

History. This is a new Department of the Army regulation.

Summary. This regulation establishes policies and responsibilities for managing weather functions within the Army. It further delineates Army responsibilities as stated in AR 115–10/AFI 15–157(IP), addresses Army-unique issues related to weather support, and includes Army weather issues not applicable to AR 115–10/AFI 15–157(IP).

Applicability. This regulation applies to the Active Army, the Army National Guard/Army National Guard of United States, and the U.S. Army Reserve, unless otherwise stated.

Proponent and exception authority. The proponent of this regulation is the Deputy Chief of Staff, G–2. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix C).

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Deputy Chief of Staff, G–2 (DAMI–OPO), 1000 Army Pentagon, Washington, DC 20310–1000.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff, G–2 (DAMI–OPO), 1000 Army Pentagon, Washington, DC 20310–1000.

Distribution. This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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Glossary

Chapter 1
General

Section I
Introduction

1–1. Purpose
This regulation establishes policies, duties, responsibilities, and relationships applicable to Army organizations engaged in meteorological and related activities.

1–2. References
Required and related publications and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations
Abbreviations used in this regulation are explained in the glossary.

1–4. Responsibilities
Responsibilities are listed in section II of chapter 1.

1–5. Objectives
a. Enabling obligations to U.S. Air Force weather units in support of the Army.

(1) AR 115–10/Air Force Instruction (AFI) 15–157(IP) directs support to the U.S. Air Force (USAF) units and/or elements providing weather services to Army forces. The Army will fund this support within Army baseline standards and the USAF will not be charged for or requested to provide reimbursement for Army-provided services.

(2) All budgets and administrative and logistical services in support of USAF weather personnel will be commensurate with the corresponding services provided to Army organizations supported. The Army provides the USAF with facilities that meet the Assistant Chief of Staff for Installation Management (ACSIM)'s standard for USAF battlefield weather support facilities for squadrons and detachments.

(3) The Army provides services and facilities to USAF weather personnel as part of the garrison and/or senior commanders' respective budgets.

(4) All services provided to the USAF weather teams or squadrons are provided to the Army baseline standards. USAF pays for services beyond the baseline standard unless the respective service is requested by the Army.

Note. See chapter 2 for detailed information.

b. Weather services and needs. Army organizations identify weather services and needs to the first staff weather officer (SWO) in their chain of command, per chapter 3 of this regulation. Weather requirements for the Army are identified by the U.S. Army Training and Doctrine Command (TRADOC) per AR 115–10/AFI 15–157(IP).

c. Collaboration. Army laboratories and centers involved in weather and geospatial-related research and development activities:

(1) Manage their overall research and development (R&D) programs in this area with a focus on development of synergies, reduction of costs, and enhancement of technical productivity toward the development of operational weather and geospatial capabilities (for example, tools and applications).

(2) Share all tools, applications, and intellectual capital among these laboratories and centers.

(3) Form a standing and/or formal community of practice (CoP).

d. Army-owned weather equipment used in support of controlled airspace and Army aircraft will be maintained and calibrated per applicable Federal standards, technical orders (TOs), technical manuals, and manufacturer's specifications.

Section II
Responsibilities

1–6. Assistant Secretary of the Army (Acquisition, Logistics and Technology)
The ASA (ALT) will—

a. Be responsible for developing, acquiring, fielding, and sustaining materiel solutions to meet the Army's weather and logistical requirements.

b. Be responsible for funding:

(1) Weather R&D initiatives and weather research, development, test, and evaluation (RDT&E) support to test ranges and centers.

(2) The Army's annual contribution to the Office of the Federal Coordinator for Meteorology (OFCM), as directed by the Office of the Secretary of Defense and/or Department of Defense (DOD).

(3) Army responsibilities for collecting, processing, modeling, and transmitting weather data, automated decision aids, and other weather products.

(4) Weather data collection and processing by Army personnel directly supporting Army weapons systems, activities, or operations.

(5) Live, virtual, and constructive environmental simulations for use during training and exercises.

1–7. Assistant Chief of Staff for Installation Management

The ACSIM will—

a. Fund support for the nontactical USAF weather organizations at U.S. Army Installation Management Command (IMCOM)-controlled airfields and/or heliports commensurate with, and comparable to, the support IMCOM provides to its garrison staff organizations and/or functions on each installation. The USAF weather organizations will receive the baseline level of nonreimbursable base operations support, facility sustainment restoration, and modernization support that the garrison receives, as well as any operating support at the same level as the garrison staff (for example, personal computers, furniture, office equipment, office supplies, travel, and per diem for USAF-provided weather subject matter experts directly supporting a garrison requirement).

b. Provide support to USAF weather personnel in accordance with chapter 2.

1–8. Deputy Chief of Staff, G–2

The DCS, G–2 will—

a. Serve as the Army staff (ARSTAF) lead for weather policy, activities, capabilities, and issues.

b. Serve as the lead for policy, planning, and implementation oversight for the integration of meteorological operations.

c. Coordinate inter-Service policy with the USAF and collaborate with the Office of the Secretary of Defense; the Joint Staff; the Services; Headquarters, Department of the Army (HQDA) staffs; Army commands (ACOMs); Army service component commands (ASCCs); direct reporting units (DRUs); and other Federal agencies for Army-related weather issues, concepts, and doctrine.

d. Advise the ARSTAF on weather and/or meteorology and oceanography issues, to include those related to DOD meteorological satellites.

e. Review and coordinate Army-related weather issues with the Office of the Secretary of Defense, the Joint Staff, the Services, HQDA staffs, ACOMs, ASCCs, DRUs, and other Federal agencies.

f. Coordinate Army weather requirements with the USAF and ARSTAF per AR 115–10/AFI 15–157(IP).

g. Represent the Army at—

(1) DOD and inter-Service meteorology-related and oceanography-related policy committees.

(2) DOD, national, and international meteorological forums.

h. Establish Army weather policy for operational weather support.

i. Assist Army organizations with resolving weather capabilities shortfalls in accordance with chapter 3 of this regulation.

j. Assist ACOMs and/or organizations with documenting requests for weather information and services.

k. Specify the approved format for weather information and services requests (see app B).

l. Serve as ARSTAF lead for coordinating and processing all requests for weather support.

m. Coordinate aviation weather policy and airfield and heliport weather-related matters with the U.S. Army Aeronautical Services Agency.

n. Establish an Army operational weather and geospatial R&D collaboration CoP.

o. Provide oversight for operational weather and geospatial R&D collaboration.

p. Provide oversight for the development of a R&D enterprise plan for operational weather and geospatial capabilities.

1–9. Deputy Chief of Staff, G–3/5/7

The DCS, G–3/5/7 will—

a. Validate and set priorities for weather support to Army training contingency and combat operations.

b. Provide the Army aviation weather interface to DOD, Federal, and civilian agencies.

c. Identify, document, and prioritize Army airfield and installation weather requirements.

d. Through the U.S. Army Aeronautical Services Agency—

(1) Promulgate aviation weather policy.

(2) Assist the DCS, G–2 with airfield and heliport weather-related matters.

1–10. Commanding General, U.S. Army Training and Doctrine Command

The CG, TRADOC will—

a. Communicate to the DCS, G–3/5/7 perceived shortfalls in the USAF's ability to meet Army requirements for weather support and other perceived weather deficiencies within the USAF's area of responsibility.

b. Establish doctrine, organization, training, materiel, leadership and education, personnel, and facilities requirements for the Army.

c. Represent the Army's warfighting functions by collecting and processing weather requirements from TRADOC schools and centers of excellence, U.S. Army Medical Command (MEDCOM), and U.S. Army Corps of Engineers (USACE); updating these requirements based on significant changes to the Army's strategy, force structure, organization, and doctrine; and coordinating with HQDA and USAF to recommend solutions to satisfy those requirements.

d. Develop solutions for deficiencies within the Army's area of responsibility specified in chapter 2, in coordination with the USAF SWOs assigned within TRADOC.

e. Through the U.S. Army Intelligence Center of Excellence—

(1) Represent the Intelligence Force Modernization Proponent for Army weather issues.

(2) Serve as office of primary responsibility for Army weather doctrine.

(3) Serve as office of primary responsibility for the identification, collection, and submission of Army weather requirements.

(4) Serve as office of primary responsibility for processing Army-unique weather support requirements through the Joint Capabilities Integration and Development System process as identified by ACOMs or by appropriate Joint and/or Army concept documents.

(5) Coordinate weather requirements with all TRADOC schools and centers of excellence.

(6) Serve as the TRADOC point of contact for weather capabilities and issues across the doctrine, organization, training, materiel, leadership and education, personnel, and facilities construct.

(7) Identify deficiencies in Army doctrine pertaining to weather, weather impacts, weather operations, and weather services.

(8) Assess the effectiveness of weather operations and weather services provided to the Army. Work with the U.S. Army Intelligence Center of Excellence and other applicable databases and sources to identify and/or process weather lessons learned. Formally submit shortfalls and best practices in Army weather support capabilities through the DCS, G–2 and the DCS, G–3/5/7 to the Deputy Chief of Staff for Operations, Plans, and Requirements, Headquarters, USAF (HQ USAF A3/5).

(9) Engage with TRADOC warfighting functions, proponents, and centers of excellence to incorporate Armywide weather requirements into ongoing operational weather and geospatial R&D activities.

(10) Provide representatives to and participate in the operational weather and geospatial R&D collaboration CoP.

(11) Provide subject matter expertise on Army weather requirements and enable collaboration activities to be consistent with and meet the Army's battlefield weather needs.

f. Through the U.S. Army Maneuver Support Center of Excellence—

(1) Provide subject matter expertise on Army geospatial engineering requirements and enable collaboration activities to be consistent with and meet the Army's battlefield geospatial engineering needs.

(2) Support the U.S. Army Intelligence Center of Excellence by engaging with TRADOC warfighting functions, proponents, and centers of excellence to incorporate Armywide geospatial engineering requirements into ongoing R&D collaboration efforts.

1–11. Commanding General, U.S. Army Materiel Command

The CG, AMC will—

a. Support development of fine scale weather models, decision support tools, and/or decision aids, sensors, and sensing methodologies to support atmospheric R&D.

b. Conduct atmospheric science and meteorological R&D based studies on fine scale atmospheric composition, air quality, weather models, short-term forecasts (nowcasts), decision support tools, decision aids, and sensors and sensing methodologies for military training, operations, and force protection.

c. Support development and deployment of meteorological systems and applications in support of artillery.

d. Support development of, testing of, fielding of, and training for meteorological software for the following:

(1) Army applications and systems.

(2) Integration with other Service and Joint applications.

e. Provide representatives to and participate in the operational weather and geospatial R&D collaboration CoP.

f. Fund Directorate of Logistics support for the USAF weather organizations commensurate with, and comparable to, the support the Directorate of Logistics provides to organizations on Army installations. The USAF weather organizations will receive the baseline level of nonreimbursable logistical support (for example, supply, maintenance, and transportation) within Army baseline standards.

1–12. Commanding General, U.S. Army Test and Evaluation Command

The CG, ATEC will—

a. Provide operational meteorological support for Army RDT&E test ranges and centers.

b. Upon request, provide operational meteorological support for test missions conducted away from Army RDT&E test ranges and centers.

c. Develop weather models and nowcasting tools to support RDT&E at test ranges and centers.

d. Conduct atmospheric science, meteorological, transport, and dispersion R&D activities.

1–13. Commanding General, U.S. Army Medical Command

The CG, MEDCOM will—

a. Develop models of weather's physiological changes in and effects on Soldiers.

b. Develop and provide heat and cold stress products and impacts beyond the standard USAF-provided heat and wind chill indices.

1–14. Commanding General, U.S. Army Corps of Engineers

The CG, USACE is the director and monitor for Army programs in the atmospheric, topographic, hydrographic, and terrestrial sciences. The CG, USACE will—

a. Review all emerging Army systems for impacts (natural and induced) of the environment on those systems.

b. Support cold region R&D.

c. Conduct hydrological R&D and provide hydrological studies, forecasts, and decision aids for military training, operations, and emergency purposes.

d. Provide special climatological studies and climatic design criteria for use in environmental testing, both natural and chambered.

e. Demonstrate live, virtual, and constructive environmental simulations in a common synthetic operational environment.

f. Through the Topographic Engineering Center, integrate weather and environmental information into the geospatial CoP.

g. Provide representatives to and participate in the operational weather and geospatial R&D collaboration CoP.

1–15. Commanding General, U.S. Army Combat Readiness Center and/or Safety Center

The CG, USACRC and/or Safety Center is responsible for arranging for the meteorological expertise on accident and/or incident boards when weather or weather service is or is suspected to be a contributing factor.

1–16. Commanding General, Network Enterprise Technology Command

The CG, NETCOM funds command, control, communications, computers, and information management support for the USAF weather organizations commensurate with, and comparable to, the support NETCOM agencies provide to organizations on Army installations. The USAF weather organizations will receive the baseline level of nonreimbursable command, control, communications, computers, and information management support within Army baseline standards.

1–17. Commanders, Army commands, Army service component commands, direct reporting units, Army National Guard units, Active components, and Reserve components at all levels

Commanders, ACOMs, ASCCs, DRUs, ARNG units, ACs, and RCs at all levels will—

a. State nonurgent and doctrinal weather requirements and needed weather capabilities to TRADOC and state urgent, war and/or mobilization planning, or contingency operations weather requirements and needed weather capabilities to the DCS, G–3/5/7. Coordinate all other weather requests through the command's servicing SWO. See chapter 3 for more information.

b. Document and submit deficiencies in weather operations and support identified during training, operations, exercises, and contingencies to TRADOC.

c. Send weather operations and support lessons learned to the Center for Army Lessons Learned and to the TRADOC Army Weather Proponent Office.

d. Certify Army-procured weather sensing systems per chapter 4 of this regulation.

e. Provide weather sensing at non-air traffic controlled Army airfields, heliports, airstrips, or other sites per chapter 4 of this regulation.

f. Provide funding for USAF weather services and support of USAF weather personnel per chapter 2 of this regulation.

g. Provide inputs to the annual tasking from HQDA concerning the Federal Plan for Meteorological Services and Supporting Research per chapter 6 of this regulation.

h. Submit documented deficiencies in weather operations and support identified during training, operations, exercises, and contingencies to the TRADOC Army Weather Proponent Office.

Chapter 2
Army Funding in Support of U.S. Air Force Weather Units

2–1. General
This chapter clarifies Army responsibilities for funding installation services for USAF weather organizations that provide support to the Army in accordance with AR 115–10/AFI 15–157(IP). The Army funds and provides installation support within the baseline standards to the USAF weather organizations on the same basis as for all Army organizations without reimbursement from the USAF. The supporting Army organizations are responsible for programming and budgeting to fund the installation and/or mission support services that enable the USAF to provide weather support for the installations' tactical and garrison airfield or heliport operations mission, as well as the tactical missions of the mission commanders (MCs).

2–2. Army commands and Army enterprise lead commands
IMCOM and other Army enterprise lead commands provide installation services to the USAF that includes, but is not limited to, the categories listed in this regulation and AR 115–10/AFI 15–157(IP). Installation services that are within the senior commander area of responsibility will be made available to the USAF weather organizations within the Army's operational support standard. Army supporting organizations are not required to fund activities designated as USAF responsibilities in AR 115–10/AFI 15–157(IP); support identified as above the baseline level of support on the installation; or support identified as USAF-unique (see DOD Instruction 4000.19).

a. When a USAF weather organization is directly supporting the installation MC, the MC will fund support for the USAF weather organization commensurate with, and comparable to, the support that the MC provides or funds for tactical Army units on the installation (for example, direct costs in support of training missions, deployment support for a brigade combat team, special mission airfield and/or heliport events, organizational and/or unit level maintenance, fuels, tactical equipment, per diem for USAF-provided weather subject matter expertise, and/or experts in direct support of MC tactical operations). The MC will fund operating support for USAF weather organizations providing staff integration, mission integration, and airfield services that support the MC's tactical mission. This funding will not include operating support for that portion of the USAF weather organization providing staff integration and airfield services that support garrison operations. The USAF does not distinguish between mission and garrison responsibilities when assigning personnel, and weather teams are staffed to support both missions at a given location. MCs and senior commanders will determine the amount of funding allocated for mission and installation services support.

b. Other ACOMs, ASCCs, or DRUs with assigned airfields/heliports (for example, U.S. Army Europe, Military District of Washington, U.S. Army Forces Command, TRADOC, and ATEC) will support the USAF weather organizations commensurate with, and comparable to, the support that the ACOM, ASCC, or DRU provides or funds for its own staff organizations on the installation or airfield (for example, base operations support and direct costs in support of operational missions). Installation services that are within the ACOM, ASCC, or DRU area of responsibility will be made available to the USAF weather organizations within the Army's operational support standard, to include operating support at the same level as the ACOM, ASCC, or DRU staff (for example, personal computers, furniture, office equipment, office supplies, travel, and per diem for USAF-provided weather subject matter experts directly supporting an ACOM, ASCC, or DRU requirement).

c. Enterprise supporting commands, such as NETCOM, MEDCOM, and the U.S. Army Sustainment Command, will fund support for the USAF weather organizations commensurate with, and comparable to, the support these commands provide to Army tenant organizations on the installation.

d. The USAF funds requests for support that are USAF-unique (for example, meteorological-focused services and nonstandard USAF training requirements), above baseline level services (for example, USAF-requested additional information technology services), and other requirements specified as USAF responsibilities in AR 115–10/AFI 15–157(IP).

Chapter 3
Weather Services, Information, and Needs

3–1. Scope
a. This chapter addresses weather services and needs and does not discuss Army weather requirements, which are addressed in AR 115–10/AFI 15–157(IP).

b. Weather services and needs are those necessary at the local level (mission or installation) to accomplish the assigned mission.

c. Weather requirements pertain to Armywide tactical requirements and are processed by TRADOC.

3–2. Identifying and resolving Army organizations needs for weather information and services

a. Army organizations request weather information and services based on identified needs.

b. For nontactical, garrison, nondeployed, and other than deployed missions, all ACOMs and organizations will—

(1) Identify the weather information and services required to support the following:

(a) Training, planning, and operations.

(b) Emergency management and response, airfield, range, deployment, and mobilization operations.

(2) Identify the need for the following:

(a) Tailored operational climatology, long-range outlooks, mission planning and/or execution forecasts, weather warnings, advisories, and other weather services.

(b) Hydrological forecasting, terrain analysis, and mobility assessments.

(c) Weather sensing capabilities.

(d) Army weather R&D activities.

(3) Coordinate all weather services and information requests with—

(a) The first SWO in their chain of command. USAF SWOs leverage weather capabilities provided by USAF weather flights, operational weather squadrons, and the USAF Weather Agency to meet weather services and information needs.

1. Temporary weather information needs are normally addressed via a support assistance request. This information normally consists of operational climatology, long-range planning weather, mission execution forecasts, weather warnings and advisories, and other mission-tailored graphics and text weather products.

2. SWOs can determine if a support assistance request is appropriate and can assist Army organizations with completing and routing support assistance requests.

(b) DCS, G–2 (DAMI–OP) if no SWO is assigned within the command structure (see appendix B for example requests).

c. DCS, G–2 (DAMI–OP) will determine whether formal requests are required. If the request is outside the scope of the USAF weather organization's missions, mission-essential task lists, and resources, the requesting organization will—

(1) Obtain guidance for weather services and information requests from the DCS, G–2.

(2) Document requests for weather services and information in a formal memorandum and staff through its chain of command to the DCS, G–2. These requests typically require 45 days to process.

(3) Include in/with all formal requests: the specific weather services and information required (tailored climatology, weather forecasts, warnings, advisories, observations, information, model data, mission planning and/or execution forecasts, and weather sensing systems); why, what, how, when, and where; justification and/or rationale; impact to the mission; mission-unique weather sensitivity thresholds (as required); and specific time period.

d. DCS, G–2 provides assistance and guidance per paragraph 1–8 of this regulation.

Chapter 4
Army-Owned Weather Observing Systems

4–1. Scope

a. This chapter applies to Army-owned automated weather sensing equipment for Army airfields not controlled by the Army or other air traffic control services.

b. This chapter does not apply to commercial or Government off-the-shelf weather sensing systems not intended for airfield or heliport aviation support.

c. This chapter does not apply to Army air traffic controlled airfields or heliports. For controlled airspace, please refer to AR 115–10/AFI 15–157(IP).

d. The USAF has a contract vehicle for the purchase of automated weather sensing equipment. Organizations with a valid requirement for automated weather sensing equipment must leverage the USAF contract vehicle for procurements and contract logistics support, if available. Contact the DCS, G–2 (DAMI–OPO) for further information.

4–2. Purchase of weather sensing equipment

a. AR 115–10/AFI 15–157(IP) identifies Army and USAF responsibilities for procuring weather sensing equipment at Army installations.

b. When procurement responsibility is not clear (see AR 115–10/AFI 15–157(IP)), organizations will formally

coordinate with the DCS, G–2 (DAMI–OPO) for a policy determination to ensure the procurement of weather equipment is not a USAF responsibility.

4–3. Equipment maintenance, calibration, and standardization

a. Army organizations that own weather sensing equipment supporting aviation operations will perform required user and/or operator maintenance in accordance with equipment TOs and/or operator manuals, to include equipment calibration and standardization in accordance with established maintenance schedules and other contract or local instructions outlining acceptable maintenance support and response times. Calibration and standardization should be performed upon installation, at least annually thereafter, and after any major maintenance is performed on automated weather observing systems.

b. Automated weather equipment sensor groups will be sited in accordance with the Federal Standard for Siting Meteorological Sensors at Airports–1994. Currently, installed sensors may be operated at their present locations. However, if they are relocated, organizations will comply with Federal standards. Organizations will coordinate with the host and/or supporting airfield systems maintenance to perform an annual inspection of all meteorological equipment, ensure equipment is in good condition, and verify no obstructions are affecting the equipment's siting and exposure.

c. Organizations that own automated weather sensors will have applicable operator manuals and/or TOs (soft or hard copy) on hand for each piece of an assigned fixed and deployable automated weather observing system. Organizations will operate meteorological equipment in accordance with its TO and/or operator manual.

d. Organizations will ensure automated weather observing systems are certified in accordance with Federal Meteorological Handbook Number 1 – Surface Weather Observations and Reports (FMH–1).

4–4. Standards of operation

a. FMH–1 is the authoritative source for maintenance, calibration, and certification of observing systems. Observations will be disseminated and retained per FMH–1 guidelines.

b. Army organizations owning automated weather observing systems will officially log out equipment not operating in accordance with published standards in FMH–1.

c. Army organizations owning automated weather observing systems should transfer data to the USAF Weather Agency and regional operational weather squadrons, if possible. The data from automated observing systems help improve the accuracy of weather warning services and weather forecasts.

Chapter 5
Collaboration of Weather and Geospatial Research and Development Activities

5–1. Scope

a. This chapter applies to Army laboratories engaged in meteorological R&D and addresses the development of meteorological and geospatial capabilities for validated requirements.

b. This chapter does not apply to the following:

(1) Establishment of new requirements.

(2) Creation of tools or models to solicit funding in the absence of a legitimate requirement.

5–2. General

a. The DCS, G–2, Army Research Laboratory, U.S. Army Intelligence Center of Excellence, USACE, U.S. Army Engineer School, U.S. Army Maneuver Support Center of Excellence, and U.S. Army Geospatial Center and/or Topographic Engineering Center will collaborate on Army operational weather and geospatial R&D activities.

b. These organizations will constitute the R&D collaboration CoP to accelerate the development and delivery of these capabilities to Soldiers and commanders.

5–3. Community of practice

The CoP addressed in this regulation will—

a. Follow the professional, ethical, and security guidelines set forth in DOD 5500.07–R, AR 25–1, and AR 25–2.

b. Operate across formal organizational structures to maintain a continuity of effort, diffusion of best practices, and synergy and resource efficiencies related to the development of operational weather and geospatial capabilities (for example, tools and applications) for Soldiers and commanders.

c. Engage subject matter experts and leverage their knowledge of the discipline to judge what is important, groundbreaking, and useful.

d. Include active participation by all members to ensure that operational weather and geospatial capabilities are usable, appropriate for transfer, and transferred in a timely manner.

e. Form project delivery teams to deliver operational weather and geospatial capabilities rapidly.

f. Develop a R&D enterprise plan for operational weather and geospatial capabilities. This plan will be a living document, whose purpose is to strengthen collaboration and cooperation for better execution of the responsibilities of Army senior leaders (assigned by statutory, policy, regulatory, or delegated authorities) and for better accomplishment of the missions assigned to the organizations aligned or associated with the CoP and the R&D enterprise plan, with a focus on applying these efforts for validated Army requirements and associated capability gaps.

g. Participate in regularly scheduled technical interchange meetings to advance the development of weather and geospatial tools and applications consistent with operational requirements.

h. Provide in-progress reviews for R&D collaboration activities and initiatives to the Executive Steering Group, as required.

Chapter 6
Extramural Weather Forums and Activities

6–1. North Atlantic Treaty Organization

Army representatives to North Atlantic Treaty Organization meteorological committees and forums will provide the DCS, G–2 (DAMI–OPO) with a copy of trip reports, minutes, and agendas from these meetings. In turn, the DCS, G–2 will provide pertinent and relevant information to ACOM, ASCC, and DRU weather staffs and/or proponents.

6–2. Office of the Federal Coordinator for Meteorological Services and Supporting Research

a. Office of the Federal Coordinator for Meteorological Services and Supporting Research. The mission of the Office of the Federal Coordinator for Meteorological Services and Supporting Research—also known as the Office of the Federal Coordinator for Meteorology—is to ensure the effective use of Federal meteorological resources by leading the systematic coordination of operational weather requirements, services, and supporting research among the Federal agencies. Its high-level focus includes cross-agency needs and requirements; issues and problems; studies; reports; plans; handbooks; and crosscut reviews, assessments, and analyses.

b. The Federal Plan for Meteorological Services and Supporting Research. The Federal Plan for Meteorological Services and Supporting Research is an annual report to Congress that is coordinated and staffed by OFCM. All Federal agencies with meteorological activities participate. Army organizations expending funds for meteorological activities or equipment, maintaining staff to conduct meteorological activities, or possessing weather equipment (airfield automated observing and weather radar) will participate in the annual data call for the Federal Plan for Meteorological Services and Supporting Research. The DCS, G–2 will publish supplemental instructions to accompany the annual OFCM reporting instructions.

c. Office of the Federal Coordinator for Meteorology committees and working groups. The DCS, G–2 will maintain visibility on OFCM committees and working groups and determine participation of appropriate Army subject matter experts, as required.

Chapter 7
The Staff Weather Officer

7–1. Scope

This chapter describes the general duties and responsibilities of the SWO to help a commander understand how the SWO can be leveraged to support the command.

7–2. Overview

Duties of the SWO include, but are not limited to, the following:

a. Advising the supported Army commander on weather support matters and issues.

b. Informing the ACOM of weather support capabilities and limitations, as well as how to leverage this support for Army operations, activities, missions, and functions within the command.

c. Providing or arranging for the weather needs and/or requirements of the supported ACOM.

d. Understanding the mission, roles, functions, organization, and capabilities of the supported ACOM and applying weather subject matter expertise to enhance and/or enable the overall mission of the command.

e. Monitoring the overall weather support mission for the Army commander and acting as the commander's agent to identify and resolve weather issues that impact the command's mission.

f. Applying weather subject matter expertise, preparing continued weather estimates, coordinating with other staff

officers whose areas of interest will be affected by the recommendation, and making recommendations to assist the Army commander in reaching decisions and establishing policies.

g. Integrating weather into Army decisionmaking processes.

h. Recommending to the commander policies and procedures to enhance capabilities in their area of interest.

i. Performing all weather-related subject matter expertise duties and responding to taskings and requests from the supported ACOM.

Appendix A
References

Section I
Required Publications

AR 25–1
Army Information Technology (Cited in para 5–3*a*.)

AR 25–2
Information Assurance (Cited in para 5–3*a*.)

AR 115–10/AFI 15–157(IP)
Weather Support for the U.S. Army (Cited on the title page, paras 1–5*a*(1), 1–5*b*, 1–6*f*, 2–1, 2–2, 2–2*d*, 3–1*a*, 4–1*c*, 4–2*a*, and 4–2*b*).

DOD 5500.07–R
Joint Ethics Regulation (JER) (Cited in para 5–3*a*.) (Available at http://www.dtic.mil/whs/directives.)

DOD Instruction 4000.19
Support Agreements (Cited in paras 2–1, 2–2.) (Available at http://www.dtic.mil/whs/directives.)

FCM–S4–1994
Federal Standard for Siting Meteorological Sensors at Airports (Cited in para 4–3*b*.) (Available at http//www.ofcm.gov.)

FMH–1
Federal Meteorological Handbook Number 1 – Surface Weather Observations and Reports (Cited in paras 4–3*d*, 4–4*a*, 4–4*b*, and C–4*c*(4).) (Available at http//www.ofcm.gov.)

Section II
Related Publications
A related publication is a source of additional information. The user does not have to read it to understand this regulation.

AR 11–2
Managers' Internal Control Program

AR 25–30
The Army Publishing Program

AR 70–1
Army Acquisition Policy

AR 70–38
Research, Development, Test and Evaluation of Materiel for Extreme Climatic Conditions

AR 73–1
Test and Evaluation Policy

AR 95–1
Flight Regulations

AR 602–2
Manpower and Personnel Integration (MANPRINT) in the System Acquisition Process

DOD Instruction 3201.01
Management of DOD Research and Development Laboratories (Available at http://www.dtic.mil/whs/directives.)

ER 10–1–25
U.S. Army Cold Regions Research and Engineering Laboratory (Available at http://publications.usace.army.mil/publications/eng-regs/.)

ER 10–1–45
U.S. Army Topographic Engineering Center (TEC) (Available at http://publications.usace.army.mil/publications/eng-regs/.)

ER 25–1–8
U.S. Army Corps of Engineers (USACE) Communities of Practice (Available at http://publications.usace.army.mil/publications/eng-regs/.)

ER 70–1–5
Corps of Engineers Research and Development Program (Available at http://publications.usace.army.mil/publications/eng-regs/.)

Section III
Prescribed Forms
This section contains no entries.

Section IV
Referenced Forms
DA Forms are available on the Army Publishing Directorate Web site (http://www.apd.army.mil/).

DA Form 11–2
Internal Control Evaluation Certification

DA Form 2028
Recommended Changes to Publications and Blank Forms

Appendix B
Weather Information, Services, and Needs

B–1. General

Sample memorandums for completing a request for weather services to brigade-sized units and new Army programs are displayed in figures B–1 and B–2.

DEPARTMENT OF THE ARMY
ORGANIZATION
STREET ADDRESS
CITY STATE ZIP

OFFICE SYMBOL Date

MEMORANDUM THRU Send memorandum through your chain to headquarters

FOR Headquarters, Department of the Army, Deputy Chief of Staff, G–2 (DAMI–OPO), 1000 Army Pentagon, Washington, DC 20310-1000

SUBJECT: Request for Weather Services

1. Garrison location and region: Your installation, state, or country.

2. Present weather servicing unit: If you have a weather unit assigned to your command or have weather services provided by an Air Force Operational Weather Squadron, list them here. Otherwise, enter: None.

3. Garrison activities requiring weather support: Provide a complete listing of the activities and weather services needed, and why.

a. State what type of activity needs the weather support and where. For example: Flight activities at Fort XXX Army airfield. This activity provides medical evacuation flights for training injuries at the YYYY range.

b. Flight activities at Fort XXX Remote Helipad. This helipad supports VIP and logistics runs to and from the CCC Training Area TOC and the Main Post. Helicopter runs are made daily during duty hours.

c. Area forecast for the CCC Training Area to support troop bivouac and movement, and to support vehicle movement.

d. Staff weather support to the Command Group Operations Cell. The operations cell requires 24/7 weather information to maintain the safety of the training environment during exercises. Specifically, it must have accurate and timely notification of any hazardous weather forecast to affect the training areas. Additionally, daily forecasts for a five-day period are needed in order to optimize the training schedule and adjust as needed in order to best use available time and avoid lost training due to weather.

e. Staff weather support to the Division Tactical Operations Cell (DTOC). The DTOC replicates the higher headquarters for BCTs training at Fort XXX. An AF weather function is needed in the DTOC to play the role of a division weather team for the AF weather teams training with BCTs and aviation elements at Fort XXX. This weather

Figure B–1. Sample memorandum for a request for weather services

function must integrate with the other OTOC functions so that the DTOC effectively replicates a division headquarters.

4. Reason for request: Self explanatory. Why do you need the support?

5. Weather support required: The specifics of what you need. For example:

a. Observing support sufficient to ensure garrison, airfield, and airspace safety during routine flying operations.

b. Forecasting support to 33 Fort XXX-based aircraft operating daily at Main Post helipad, Main Post airfield, and remote helipad.

c. Watch, Warning, Advisory, and other resource protection weather support for the Fort XXX garrison and the CCC Training area.

e. Forecasting support to the Command Group Operations Cell to ensure the safe execution of training.

6. Point of contact is CW4 Jones, G3 Aviation Office, DSN: 555-5555, COM: 555-555-5555, joe.jones@ftxxx.army.mil.

XXXXX
Brigadier General, USA
Commanding

Figure B–1. Sample memorandum for a request for weather services–Continued

DEPARTMENT OF THE ARMY
ORGANIZATION
STREET ADDRESS
CITY STATE ZIP

OFFICE SYMBOL Date

MEMORANDUM FOR Headquarters, Department of the Army, Deputy Chief of Staff, G–2 (DAMO–OP), 1000 Army Pentagon, Washington, DC 20130-1000

SUBJECT: Request for weather services for a new Army program

1. Army program: Name of new program.

2. Current weather support: None.

3. Activities requiring weather service: List the activities requiring weather services from initial testing to deployment.

4. Reason for request: Why does new program require weather services?

5. Weather services required: List types of weather services needed. For example, hourly observations during flight testing, weather forecasts for periods of testing, weather outlooks for test planning, and weather warning and watch support. If known, include the specific operational thresholds for weather parameters. Examples of weather data needed for an aviation asset:

a. Launch and recovery site and alternate landing sites.

(1) Wind speed (sustained and gusts).

(2) Wind direction.

(3) Air and ground temperature.

(4) Absolute humidity.

(5) Pressure, pressure altitude, and density altitude.

(6) Visibility.

(7) Significant weather.

b. Enroute (up to 20,000 feet mean sea level).

(1) Wind speed (1000 foot increments).

Figure B–2. Sample memorandum for a weather request for a new Army Program

(2) Wind direction (1000 foot increments).

(3) Air temperature (1000 foot increments).

(4) Cloud cover amount (layers), base height, and thickness.

(5) Turbulence.

(6) Icing.

(7) Wave height.

(8) Sea surface temperature.

(9) Space weather impacts.

(10) Visibility.

(11) Significant weather.

c. Sensor target site.

(1) Wind speed (ground).

(2) Wind direction (ground).

(3) Air and ground temperature.

(4) Absolute humidity.

(5) Atmospheric transmittance.

(6) Scintillation.

(7) Solar illumination.

(8) Lunar illumination.

(9) Pressure.

(10) Visibility.

(11) Cloud cover amount (layers), base height, and thickness.

Figure B–2. Sample memorandum for a weather request for a new Army Program–Continued

6. Point of contact. Name, unit, title, DSN phone number, commercial phone number, and e-mail address.

XXXX
Program Manager

Figure B–2. Sample memorandum for a weather request for a new Army Program–Continued

B–2. Examples

Tables B–1 and B–2 are illustrative examples of how to request weather warning criteria.

Table B–1
Launch and recovery weather alert criteria

Alert Type	Advisory Watch	Warning
Tornado within 5 nautical miles (NMs)	Potential exists	Desired lead time (DLT) 30 minutes
Hail >3/4 inch	Potential exists	DLT 2 hours
Hail >1/2 but <3/4 inch	Potential exists	DLT 1 hour
Hail <1/2 inch	Potential exists	DLT 2 hours
Winds >50 knots	Potential exists	DLT 2 hours
Winds >35 but <50 knots	Potential exists	DLT 1 hour
Winds >25 but <35 knots	Not applicable (N/A)	DLT 1 hour
Cross winds >10 but <20 knots	N/A	Observed
Cross winds >20 knots	N/A	Observed
Low level wind shear	N/A	Observed
Freezing precipitation	Potential exists	DLT 2 hours
Heavy precipitation >2 inchs within 12 hours	Potential exists	DLT 2 hours
Heavy snow >2 inchs within 12 hours	Potential exists	DLT 2 hours
Blizzard duration >3 hours (>30 knots, falling and blowing snow, and < 1/4 statute mile visibility)	Potential exists	DLT 2 hours
Visibility <5/8 statute mile in blowing sand and/or dust	Potential exists	DLT 2 hours
Sea surface temperature <40 fahrenheit	N/A	Observed
Wave height >3 meters/12 feet	N/A	Observed
Frost on station	Potential exists	DLT 5 hours
Wind chill temperature <-20 fahrenheit	DLT 24 hours	Observed

Table B–1
Launch and recovery weather alert criteria—Continued

Alert Type	Advisory Watch	Warning
Lightning within 20NMs	N/A	Observed
Lightning within 10NMs	N/A	Observed
Lightning within 5NMs DLT 30 minutes	N/A	Observed

Table B–2
En route weather alert criteria

Alert Type	Advisory Watch	Warning
Thunderstorms within 25NMs orbit area	N/A	DLT 1 hour
Turbulence >moderate surface-300 thousand feet	N/A	DLT 1 hour
Any icing within 25NMs	N/A	DLT 1 hour

Appendix C
Internal Control Evaluation

C–1. Function

The function addressed in this evaluation is associated with the support of USAF weather teams; assessment of weather services and needs; Army-owned automated weather observing systems; collaboration of Army laboratories; and extramural activities.

C–2. Purpose

The purpose of this evaluation is to assist commanders and organizations in evaluating key internal controls outlined below. It is not intended to address all internal control elements.

C–3. Instructions

Answers must be based upon the actual testing of key internal controls (for example, document analysis, direct observation, sampling, simulation, and/or others). Answers that indicate deficiencies must be explained and the corrective action indicated in the supporting documentation. These internal controls must be evaluated at least once every 5 years. Certification that this evaluation has been conducted must be accomplished on DA Form 11–2 (Internal Control Evaluation Certification).

C–4. Test questions

a. Support of U.S. Air Force weather teams.

(1) Do supporting Army organizations program and budget for support to USAF weather units that provide weather services for the installations tactical and garrison airfield and senior commander's tactical mission on a nonreimbursable basis?

(2) Do supporting Army organizations provide services and support commensurate with that given to the Army?

(3) Do commanders submit documented deficiencies in weather operations and support identified during training, operations, exercises, and contingencies to the TRADOC Army Weather Proponent Office, Fort Huachuca, AZ?

b. Weather services and needs.

(1) Do commanders identify and document their needs for weather services?

(2) Do Army commanders or organizations coordinate all weather information and service requests with the USAF SWO assigned to their respective organizations?

(3) If there is no SWO at their echelon, do Army commanders or organizations coordinate all weather information and service requests with the SWO assigned to their next higher echelon?

(4) For organizations without a SWO assigned, do these organizations coordinate their weather information and service requests with the DCS, G–2?

(5) Do formal requests for specific weather information and services submitted to the DCS, G–2 include why, what, how, when, and where, along with justification, rationale, and impact to the mission?

(6) Do ACOMs or organizations receive a written response to their requests from the DCS, G–2?

c. Army-owned automated observing equipment.

(1) Do organizations owning automated weather observing systems have applicable operator manuals and TOs on hand for each system?

(2) Do organizations operate automated weather observing systems in accordance with these operator manuals and/or TOs?

(3) Have commanders investigated use of the USAF weather contract as a means to purchase and maintain automated weather observing systems?

(4) Are automated weather observing systems maintained, calibrated, and certified per FMH–1?

d. Army laboratories.

(1) Do laboratories collaborate with each other to advance the development of Soldier tools?

(2) Did the collaboration CoP develop a R&D plan for operational weather and geospatial tools, applications, and projects?

(3) Did the CoP ensure that operational weather and geospatial-related tools, applications, and projects were usable, appropriate for transfer, and transferred in a timely manner?

e. Extramural activities.

(1) Do commanders keep track of the meteorological equipment, expenditures, and activities within their organization?

(2) Do commanders report this information as directed for the annual Federal Plan for Meteorological Services and Supporting Research?

C–5. Supersession

Not applicable.

C–6. Comments

To make this evaluation a more useful tool for internal controls, submit comments to the DCS, G–2 (DAMI–OPO), 1000 Army Pentagon, Washington, DC 20310–1000.

Glossary

Section I
Abbreviations

AC
Active component

ACOM
Army command

ACSIM
Assistant Chief of Staff for Installation Management

AFI
Air Force Instruction

AMC
U.S. Army Materiel Command

ARNG
Army National Guard

ARSTAF
Army staff

ASA (ALT)
Assistant Secretary of the Army (Acquisition, Logistics and Technology)

ASCC
Army service component command

ATEC
U.S. Army Test and Evaluation Command

CG
commanding general

CoP
community of practice

DCS, G–2
Deputy Chief of Staff, G–2

DCS, G–3/5/7
Deputy Chief of Staff, G–3/5/7

DLT
desired lead time

DOD
Department of Defense

DRU
direct reporting unit

FMH
Federal Meteorological Handbook

HQDA
Headquarters, Department of the Army

IMCOM
U.S. Army Installation Management Command

MC
mission commander

MEDCOM
U.S. Army Medical Command

N/A
not applicable

NETCOM
Network Enterprise Technology Command

NM
nautical mile

OFCM
Office of the Federal Coordinator for Meteorology

RC
Reserve component

R&D
research and development

RDT&E
research, development, test, and evaluation

SWO
staff weather officer

TRADOC
U.S. Army Training and Doctrine Command

TO
technical order

USACE
U.S. Army Corps of Engineers

USACRC
U.S. Army Combat Readiness Center

USAF
U.S. Air Force

Section II
Terms
This section contains no entries.

Section III
Special Abbreviations and Terms
This section contains no entries.